WHAT IS CLAIMED IS:

1. An isolated mammalian placenta which has been exsanguinated and perfused under sterile conditions.

2. The isolated mammalian placenta of claim 1 wherein the solution used to perfuse the placenta contains an anticoagulant solution.

3. The isolated mammalian placenta of claim 1 wherein the solution used to perfuse the placenta contains an antimicrobial solution.

4. The isolated mammalian placenta of claim 1 wherein the solution used to perfuse the placenta contains growth factors.

5. The isolated mammalian placenta of claim 1 wherein the placenta is human.

6. The isolated mammalian placenta of claim 1 which has been stored from about 2 to 24 hours after the expulsion of the placenta from the uterus.

7. An isolated mammalian placenta which has been exsanguinated and perfused and incubated under conditions to allow for the production of embryonic-like stem cells and other multipotent stem cells from said placenta.

8. The isolated mammalian placenta of claim 7 which has been incubated for a period of about 2 to 24 hours.

9. The isolated mammalian placenta of claim 7 which has been perfused or incubated for a period of about 24 to more than 48 hours.

10. An isolated, perfused mammalian placenta which comprises viable embryonic-like stem cells.

11. The isolated placenta of claim 10 wherein the stem cells are OCT-4- and ABC-p+.

12. The isolated mammalian placenta of claim 1 which has been perfused for at least two hours.

13. The isolated mammalian placenta of claim 12 which has been perfused for at least eleven hours.

14. The mammalian placenta of claim 10 wherein the placenta is recovered after birth.

15. The isolated mammalian placenta of claim 13 which has been perfused for at least twenty-four hours.

16. The isolated mammalian placenta of claim 10 wherein the placenta is perfused with a solution containing growth factors.

17. The isolated mammalian placenta of claim 7 which has been perfused with a solution containing growth factors.

18. The isolated mammalian placenta of claim 7 which is human.

19. A method of culturing a mammalian placenta comprising obtaining a placenta after expulsion from the uterus, exsanguinating the placenta, and perfusing the placenta under sterile conditions.

20. The method of claim 19 wherein the placenta is perfused with a solution containing an anticoagulant solution.

21. The method of claim 19 wherein the placenta is perfused with a solution containing an antimicrobial agent.

22. The method of claim 19 wherein the placenta is human.

23. The method of claim 19 wherein the placenta has been stored for about two to twenty-four hours after expulsion from the uterus.

24. The method of claim 19 wherein said expulsion is at birth.

25. The method of claim 23 wherein the placenta is stored at room temperature.

26. The method of claim 23 wherein the placenta is stored under refrigeration or freezer conditions.

27. A method for culturing an isolated mammalian placenta which has been exsanguinated and perfused comprising culturing the placenta under conditions to allow for the production of embryonic-like stem cells from said placenta.

28. The method of claim 27 wherein culturing the placenta comprises perfusing the placenta.

29. The method of claim 27 or 28 wherein the placenta has been incubated for a period of about twenty-four to forty-eight hours.

30. The method of claim 27 wherein the placenta has been perfused for at least two hours.

31. The method of claim 30 wherein the placenta has been perfused for at least eleven hours.

32. The method of claim 31 wherein the placenta has been perfused for at least twenty-four hours.

33. The method of claim 32 wherein the placenta has been preferred for more than forty-eight hours.

34. The method of claim 28 wherein the placenta has been perfused with a solution containing growth factors.

35. The method of claim 27 wherein the placenta is human.

36. An isolated human placental stem cell which is OCT-4+ and ABC-p+.

37. The stem of claim 35 wherein the cell is a human cell.

38. An isolated mammalian placental stem cell having at least the following characteristics: CD10+, CD29+, CD34-, CD44+, CD45-, CD54+, CD90+, SH2+, SH3+, SH4+, SSEA3-, SSEA4-, OCT-4+ and ABC-p+.

39. The isolated placental stem cell of claim 35 wherein said cell is SSEA3- and SSEA4-

40. A human placental stem cell which has been isolated from a post-partum human placenta after said placenta has been exsanguinated and perfused for at least 11 hours.

41. A stem cell producing apparatus which comprises:

(a) a post-partum mammalian placenta which has been exsanguinated and perfused;

(b) a means for incubating or culturing the placenta; and

(c) a means for detecting stem cells.

42. The apparatus of claim 39 further comprising a collection device for collecting stem cells.

43. The apparatus of claim 39 further comprising a means for monitoring and adjusting the culture conditions.

44. The apparatus of claim 41 wherein the monitoring and adjusting is computerized.

45. The apparatus of claim 39 further comprising a cell separation device.

46. A method of treating disease in a human which comprises administering a human placental stem of claim 35, 37 or 38.

47. A method of transplanting stem cells which comprises administering to a patient in need thereof a human placental stem cell of claim 35, 37 or 38.

48. A pharmaceutical composition which comprises a human placental stem cell of claim 35, 37 or 38.

49. The pharmaceutical composition of claim 46 which further comprises umbilical cord or placental blood.

50. A committed cell which has been differentiated from a human placental stem cell of claim 35, 37 or 38.

51. An isolated, homogenous population of human placental stem cells which can differentiate into all cell types.

52. A homogenous population of viable human placental stem cells which exhibit at least the following cell surface markers: OCT-4+ and ABC-p+.

53. An isolated, homogenous population of human placental stem cells which is multipotent.

54. An isolated placenta containing a cell which is neither fetal nor maternal in origin.

55. The stem cells of claim 49 or 51 wherein the stem cells originate from a placenta.

56. A composition suitable for bone marrow transplantation which comprises a population of hematopoietic stem cells enriched in cells that are CD34+ and CD38-.

57. The composition of claim 53 further comprising cord blood having cells that are CD34+ and CD38+.

58. A composition suitable for bone marrow transplantation which comprises a population of hematopoietic stem cells enriched in cells that are CD34- and CD38-.

59. The composition of claim 54 further comprising cord blood having cells that are CD34+ and CD38+.